NC/QC/YD/2020-21/W2-LD-C1 Date: 08-09-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Construction of Lead of Drain to SWD in Ward No.02 of Yelahanaka Sub Division.}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri.K.N.Ravikumar.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	156 min	Shall not be less than 30 min
2	Final setting time	265 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.11%	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	2.09mm	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	28.64 N/Sq mm	Shall not be less than 27 N/Sqmm

AE-2
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NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
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NC/QC/YD/2020-21/W2-LD-PCC1 Date: 08-09-2020

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Construction of Lead of Drain to SWD in Ward No.02 of Yelahanaka Sub Division.}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri.K.N.Ravikumar.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	64.75	0 -20	30- 70
10mm	30.20	0 -5	10- 35
4.75mm	4.05	------	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	97.35	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	82.05	60-95	75-100	85-100	
01.18	74.80	30-70	55-90	75-100	
600.mic	47.15	15-34	35-59	60-79	
300.mic	22.55	5-20	8-30	12-40	
150.mic	6.20	0-10	0-10	0-10	

AE-2
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EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-LD-CE1 Date: 10-09-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Construction of Lead of Drain to SWD in Ward No.02 of Yelahanaka Sub Division.}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri.K.N.Ravikumar.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	154 min	Shall not be less than 30 min
2	Final setting time	270 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	1.86 %	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	1.92 mm	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	28.54 N/Sq mm	Shall not be less than 27 N/Sqmm

AE-2
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AE-02

Page No. 1/1,

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NC/QC/YD/2020-21/W2-LD-FA2 Date: 10-09-2020

1. TESTING OF FINE AGGREGATES :

Sub Testing of Fine Aggregates.
{Project*: Construction of Lead of Drain to SWD in Ward No.02 of Yelahanaka Sub Division.}
Ref. Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri.K.N.Ravikumar.

TABLE - 1.1 : SIEVE ANALYSIS

IS Sieve Size,mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -II	
04.75	96.15	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	80.25	60-95	75-100	85-100	
01.18	71.05	30-70	55-90	75-100	
600. mic	46.80	15.34	35-59	60-79	
300.mic	24.50	5-20	8-30	12-40	
150.mic	6.35	0-10	0-10	0-10	

TABLE 1.2 :

Sl No	Test Conducted	Sample	Results	Requirements as Per IS. Specification IS :383-1970 (Reaffirmed 2002)
1	Bulking of Sand	001	17.66%	-----
2	Silt Content	----	0.59%	Not more than 8%
3	Specific Gravity	----	2.61	-------

AE-2
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NC/QC/YD/2020-21/W2-LD-CA2 Date: 10-09-2020

1. TESTING OF COARSE AGGREGATES (20 mm):

Sub: Testing of Construction Materials.
{Project*: Construction of Lead of Drain to SWD in Ward No.02 of Yelahanaka Sub Division.}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri.K.N.Ravikumar.

Table - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2002) % Passing	
	20 mm Sample	Single size	Graded
40 mm	100.00	100.00	100.00
20 mm	94.70	85-100	90 - 100
10 mm	45.15	0 - 20	25 - 55
4.75 mm	3.80	0 - 5	0 - 10

TABLE 1.2 :

SL No	Test conducted	Results	Requirements as per IS 383-1970 & Tests Conforms to IS 2386(Part I to IV) – 1963 (Reaffirmed on 2002)
1	Flakiness Index	25.46%	Not to exceed 25 %
2	Crushing value	28.72 %	Not to exceed 45 % for concrete other than for wearing surfaces and 30% for concrete for wearing surfaces

AE-2
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NC/QC/YD/2020-21/W2-LD-CB2 Date: 01-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Construction of Lead of Drain to SWD in Ward No.02 of Yelahanaka Sub Division.}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri.K.N.Ravikumar.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	24-09-20	01-10-20	07	22500	365	16.22	16.15
	002	"	"	"	"	370	16.44	
	003	"	"	"	"	355	15.78	

AE-2
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Page No. 1/1,

AE-02

NEWZEN CONSULTANT ★ Bangalore ★

NC/QC/YD/2020-21/W2-LD-CB3 **Date: 03-10-2020**

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Construction of Lead of Drain to SWD in Ward No.02 of Yelahanaka Sub Division.}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri.K.N.Ravikumar.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	26-09-20	03-10-20	07	22500	375	16.67	**16.74**
	002	"	"	"	"	385	17.11	
	003	"	"	"	"	370	16.44	

AE-2

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AE-02

Page No. 1/1,

NEWZEN CONSULTANT ★ Bangalore ★

NC/QC/YD/2020-21/W2-LD-CB1A Date: 19-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project*: Construction of Lead of Drain to SWD in Ward No.02 of Yelahanaka Sub Division.}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri.K.N.Ravikumar.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	21-09-20	19-10-20	28	22500	500	22.22	**22.44**
	002	"	"	"	"	510	22.67	
	003	"	"	"	"	505	22.44	

AE-2
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NC/QC/YD/2020-21/W2-LD-CB2A

Date: 22-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project*: Construction of Lead of Drain to SWD in Ward No.02 of Yelahanaka Sub Division.}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri.K.N.Ravikumar.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	24-09-20	22-10-20	28	22500	510	22.67	23.04
	002	"	"	"	"	525	23.33	
	003	"	"	"	"	520	23.11	

AE-2
A.E.E

AE-02

Page No. 1/1,

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NC/QC/YD/2020-21/W2-LD-CB3A

Date: 24-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project*: Construction of Lead of Drain to SWD in Ward No.02 of Yelahanaka Sub Division.}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri.K.N.Ravikumar.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	26-09-20	24-10-20	29	22500	495	22.00	**22.22**
	002	"	"	"	"	500	22.22	
	003	"	"	"	"	505	22.44	

AE-2

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Page No. 1/1,

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